Site Listor Grane Manked,
ID #: IND 78031 7432
Break: 1,0
Other: NO Date

Site ID: 174 /55

Site Name: Clinton Engines

Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, S.W. burial, etc)

Before 1950, the site was owned by The Maquoketa Company and used for agricultural purposes. In 1950, Clinton Engines acquired the property from the Maquoketa Company. From 1950 to 2002, the site was owned by Clinton Engines. The site manufactured outboard boat motors, lawn mowers, and saws. According to the Phase I/II, several underground storage tanks were located on the site. According to the submitted reports, the underground storage tanks stored gasoline, diesel, waste oil, and toluene and were removed in 1986. Three underground storage tanks were removed by Environmental Management Services. Upon removing the tanks, thirteen cubic yards of soil at Tank 3 was excavated and eight soil samples were collected ranging from 9' to 15' bgs. As of 2002, the City of Maquoketa owns the facility. The site includes an office building, active machine shop, and dilapidated foundry structures.

Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)

According to the Phase I, October 1999, nine soil samples were collected and analyzed as follows B1, B4, and B9 for OA1/OA2, B2 for Priority Pollutant (PP) metals/cyanide/PCBs, B3, B7, and B8 for PP Metals/Cyanide, B6 for VOCs. Additionally, groundwater samples were collected and analyzed as follows: B1 and B9 for OA1/OA2, B2 for PP metals/cyanide/PCBs, B3 and B6 for VOCs. An asbestos inspection was performed at the site. Samples were collected from the walls, ceiling tile, thermal insulation, floor tile and mastic, floor tile and mastic, floor board, and roofing material located from the office building and areas of the manufacturing building.

Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.

Toluene was detected at concentrations that exceed the statewide standard in groundwater sample B6 at 673 mg/L. The statewide standard for toluene is 7 mg/L. It is noted that, according to the submitted report, the source of toluene concentration is associated with the former tank that stored toluene on site. Additionally, chlorinated solvents have been identified at the site; however, the extent of contamination has not been well characterized. Additionally, beryllium was identified in soil samples B2-3' (0.735 mg/kg), B3-1' (0.623 mg/kg), B7 (0.762 mg/kg), and B8 (0.664 mg/kg). The statewide standard for beryllium is 0.48 mg/kg. Though concentrations exceed statewide standards, the concentrations seem to be near or below background levels. Arsenic was detected in soil samples B2-3' (4.0 mg/kg), B3-1' (4.0), B7-2' (6.0), and B8-1' (4.0). The statewide standard for arsenic is 1.4 mg/kg. Although arsenic concentrations exceed the statewide standards, concentrations seem to be near or below background levels at the site. Organic constituents were detected at concentrations exceeding statewide standards in groundwater samples B3 and B6, specifically, benzene and naphthalene. Dichloroethylene, trichloroethylene, and vinyl chloride were detected also. There are other non-petroleum constituents that appear to be above statewide standards, however, specific concentrations for organic constituents and non-petroleum constituents are not given in the Phase I/II report

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Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.

According to the LUST file 9LTK92, there are no plastic water lines or surface water body within 200' of the site. Also according to the LUST file, the hydraulic conductivity is 0.181 m/d, thus the site is classified as a non-protected groundwater source. According to lowa Administrative Code, a protected groundwater source is an area in which a drinking water well may be installed because the flow of groundwater is sufficient for water use (i.e., the hydraulic conductivity is greater than 0.44 m/d).

Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.

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Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

Site was transferred from the LUST Section to the Contaminated Sites Section due to elevated levels of toluene in Tank 1 area. Because of the elevated levels of toluene in the groundwater samples collected and the uncertainty with other samples collected, particularly chlorinated solvents, an ESS investigation needs to be conducted at the site under CERCLA. Toluene free product appears to exist on-site.



